

Amendments to the Specification:

Please replace paragraph [0004] with the following amended paragraph:

[0004] A variety of meters are employed to measure the flow through a pipeline. One known type of meter is a positive displacement (PD) meter. Figure 1A shows the general construction for the top works of a PD meter 100. The bottom 110 of a PD meter housing 105 is suitable to attach to the internals of the PD meter by, e.g., screws or bolts. The internals of the PD meter is inserted into the pipeline to intercept the fluid flow. Fluid from the pipeline is forced to flow through a PD meter tube and causes a shaft protruding from the top works of the PD meter to spin, with one revolution of the shaft corresponding to a predetermined volume of fluid flowing through the PD meter. The volumetric flow of the fluid may be determined from the number of revolutions of the rotating components of the flow meter. Examples of the more common PD meters are oscillating piston, nutating disc, oval gear, roots, vane, rotor, and multi-piston.

Please replace paragraph [0010] with the following amended paragraph:

[0010] Figure 5 shows an angled bottom view of an interface according to one embodiment of the invention. The interface includes adapter plate 502-302 with a first set of bolts 504 and a second set of bolts 506. Pressure sensors 512-316 and 514-318 engage into explosion-proof housing 508-308. Circuit board 516 resides between retaining ring 518 and o-ring 520.

Please replace paragraph [0012] with the following amended paragraph:

[0012] Figure 7 is a schematic bottom view of a circuit board 516 suitable for inclusion in an interface. The circuit board 712-516 includes five Hall sensors 702, 704, 706, 708, 710. Referring to Figure 8A, the relative angular positions of these five Hall sensors may be seen. A circle 802 having a one unit diameter is shown and is centered at (0, 0). Three Hall effect sensors 702, 704, 706 are located in the upper right (first) quadrant eighteen degrees apart at angular locations (0, 0.5), (.155, .476), and (.294, .405). Another two Hall effect sensors 708,

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710 are located in the lower right (second) quadrant, at angular locations (.494, -.078) and (.446, -.227).

Please replace paragraph [0013] with the following amended paragraph:

[0013] As is known to those of ordinary skill in the art, the function of a Hall sensor is based on the physical principle of the Hall Effect that if a magnetic field is applied perpendicularly to an electric conductor, a voltage (the Hall voltage) is generated transversely to the current flow direction in the conductor. A number of different Hall Effect sensors exist, including latched switching sensors, bipolar switching sensors, unipolar switching sensors, and unipolar switching sensors with inverted output. The preferred Hall Effect switch for an interface according to one embodiment of the invention is a latched switching sensor. In the latched Hall Effect sensor, the output turns low with the magnetic ~~switch~~south pole on the sensing side of the sensor and turns high with the magnetic north pole on the sensing side. The output of each Hall Effect sensor does not change if the magnetic field is removed. To change the output state, the opposite magnetic field polarity must be applied.